

CLAIMS:

1. An automated parallel and redundant subscriber contact and event notification system, comprising:

a central processing unit including a memory storage means containing a database of subscriber records with data representing the identity of a subscriber or representative, identity of remote event sensors associated with the subscriber, identity of the location of each respective subscriber event sensor, identity of trigger events that trigger each respective sensor, and a list of telephone numbers to be called upon the occurrence of each specific trigger event;

a signal receiving and decoding means connected with said central processing unit for receiving an encoded event signal from a triggered event sensor, extracting data from said received event signal representing the identity and location of said triggered sensor, the identity of the triggering event, and the identity of the subscriber or representative associated with the triggered event sensor;

record processing means associated with said central processing unit for retrieving from said database, in response to said received event signal, the subscriber record corresponding to said triggered event sensor, and the list of telephone numbers to be called corresponding to the specific trigger event;

message formatting means connected with said central processing unit for formatting a message containing the identity, date, time and location of said triggered sensor and the identity of the triggering event; and

telephony processing and communication means connected with said central processing unit for placing a call simultaneously to all of the telephone numbers on said list of telephone numbers to be called corresponding to the specific trigger event, upon a call being answered playing an event-specific message requesting entry of a subscriber identification number from the call recipient, and upon entry of a valid subscriber identification number, delivering said event-specific message to the identified call recipient.

2. The system according to claim 1, further comprising:

telephone switching and conferencing means connected with said central processing unit and said telephony processing and communication means for connecting an authorized subscriber or identified call recipient, after said message has been delivered, in direct communication with a predetermined or selected telephone number.

3. The system according to claim 1, wherein

said signal receiving and decoding means comprises means for receiving and decoding encoded signals selected from the group consisting of DTMF signals, digital data packet DDP signals, wireless data signals, wireless cellular signals, wireless control channel signals, radio frequency RF signals, and wireline signals.

4. The system according to claim 3, wherein

said signal receiving and decoding means comprises a signal receiving and processing device selected from the group consisting of a modem, digital signal processor DSP, a wireless transceiver, a wireline device and a radio frequency RF transceiver.

5. The system according to claim 1, wherein

said telephony processing and communication means comprises means for placing a call simultaneously over communications channels selected from the group consisting of publicly switched telephone network (PSTN), a direct wired connection, wireless communications network, cellular communications network, a paging network, Internet network connection, email network connection, a intranet connection, radio frequency RF channels and networks, and electronic messaging systems.

6. The system according to claim 1, wherein

said message formatting means includes means for selectively formatting said message into formats selected from the group consisting of DTMF tones, voice, text, fax, email, pager, electronic, and digital.

7. The system according to claim 1, wherein

said database of subscriber records includes at least one fax number and at least one email address of a contact entity to be notified upon the occurrence of each specific trigger event; and

said message formatting means comprises means for formatting said message into a digital format capable of being displayed and printed as a text message upon being received

8. The system according to claim 1, further comprising:

input means connected with said central processing unit for receiving input from an authorized subscriber whereby the authorized subscriber may create, record, retrieve, view, edit and update his particular subscriber record.

9. The system according to claim 8, wherein

said input means comprises means for receiving input from an authorized subscriber whereby the authorized subscriber may selectively create, record and edit messages to be delivered, designate the format in which said messages are to be received, the desired communications channels, the hours of operation, and program responses which the system will take in response to different types of events.

10. The system according to claim 8, wherein

said input means comprises an interactive interface device selected from the group consisting of an Internet interface connection, a telephone interactive voice response device (IVR), speech recognition device, and text to speech device.

11. The system according to claim 1, further comprising:

a network of alarm and security service companies having subscriber security systems connected to their respective central monitoring stations and connected via a network connection in communication with said central processing unit whereby said automated parallel and redundant subscriber contact and event notification system is used to locate and contact their subscribers and thereafter place them in direct communication with the respective alarm or security service company for subsequent action

12. A method for automated parallel and redundant subscriber contact and event notification, comprising the steps of:

providing a database of subscriber records encoded with data representing the identity of a subscriber or authorized representative, the identity of remote event sensors associated with the subscriber, identity of the location of each respective subscriber event sensor, identity of trigger events that trigger each respective sensor, and a list of telephone numbers to be called, and devices to be notified upon the occurrence of each specific trigger event;

receiving and decoding an encoded event signal from a triggered event sensor, extracting data from said received event signal representing the identity and location of said triggered sensor, the identity of the triggering event, and the identity of the subscriber associated with the triggered event sensor;

retrieving from said database, in response to said received event signal, the subscriber record corresponding to said triggered event sensor, and the list of telephone numbers to be called corresponding to the specific trigger event;

formatting an event-specific message containing the date, time, identity and location of said triggered sensor and the identity of the triggering event; and

placing a telephone call simultaneously to all of the telephone numbers on said list of telephone numbers to be called corresponding to the specific trigger event, and upon a call being answered playing a message requesting entry of a subscriber identification number from each call recipient, verifying the validity of the entered subscriber identification number, and upon verification delivering said event-specific message.

13. The method according to claim 12, comprising the additional step of:

telephonically connecting an authorized subscriber or representative, after said message has been delivered, in direct communication with a predetermined or selected telephone number.

14. The method according to claim 12, wherein

said step of receiving and decoding comprises selectively receiving and decoding encoded signals selected from the group consisting of DTMF signals, digital data packet DDP signals, wireline signals, wireless data signals, wireless cellular signals, wireless control channel signals, and radio frequency RF signals.

15. The method according to claim 14, wherein

said step of receiving and decoding is carried out by a signal receiving and processing device selected from the group consisting of a modem, digital signal processor DSP, a wireless transceiver, a wireline connection and a radio frequency RF transceiver.

16. The method according to claim 12, wherein

said step of placing a call simultaneously to all of the telephone numbers on said list of telephone numbers to be called comprises placing said call over communications channels selected from the group consisting of publicly switched telephone network (PSTN), a direct wired connection, wireless communications network, cellular communications network, paging network, Internet network connection, email network connection, intranet connection, radio frequency RF channels and networks, and electronic messaging systems.

17. The method according to claim 12, wherein
said step of formatting said message comprises formatting said message into
formats selected from the group consisting of DTMF tones, voice, text, fax, pager, email,
electronic, and digital.

18. The method according to claim 12, wherein
said step of providing a database of subscriber records includes providing at
least one fax number and at least one email address of a contact entity to be notified upon
the occurrence of each specific trigger event; and

formatting said message into a digital format capable of being displayed and
printed as a text message upon being received

19. The method according to claim 12, comprising the additional step of:
allowing an authorized subscriber to selectively create, retrieve, view, edit and
update his particular subscriber record.

20. The method according to claim 18, including the additional step of:
allowing said authorized subscriber to selectively create and edit messages to be
delivered, designate the format in which said messages are to be received, the desired
communications channels to be used, the hours of operation, and to program responses
which the system will take in response to different types of events.

21. The method according to claim 19, wherein

said step of allowing an authorized subscriber to selectively create, retrieve, view, edit and update his particular subscriber record is carried out via an interactive interface device selected from the group consisting of an Internet interface connection, telephone interactive voice response device (IVR), speech recognition device, and text-to-speech device.

22. The method according to claim 21, wherein

said authorized subscriber selectively enters information via an Internet website by typing the information in text form.

23. The method according to claim 21, wherein

said interactive voice response device presents an audible menu of options and said authorized subscriber selectively enters information responsive thereto via voice response or by pressing DTMF touchtone keypads of the telephone being used.

24. The method according to claim 12, wherein

said step of placing a telephone call simultaneously to all of the telephone numbers on said list comprises calling a listed pager number to display to the recipient a number to be called and a code corresponding to the specific trigger event, and upon a call being returned responsive thereto, playing a message requesting entry of a subscriber identification number from the caller, verifying the validity of the entered subscriber identification number, and upon verification delivering said event-specific message.